

IN THE CLAIMS:

Please amend claims 1, 20-22, add new claims 46-60, and replace the claims as follows:

1. (Currently Amended) An isolated DNA molecule comprising encoding a zebrafish bone morphogenetic protein 4 gene, encoding a zebrafish bone morphogenetic protein 4 comprising and including a nucleic acid sequence selected from the group consisting of SEQ. ID NO. 1, SEQ. ID NO. 4, SEQ. ID NO. 7, SEQ. ID NO. 8, and SEQ ID NO. 9 and derivatives and fragments thereof.
2. (Original) A recombinant expression vector comprising a portion of the isolated DNA molecule of claim 1.
3. (Original) The recombinant expression vector of claim 2, wherein the portion of the isolated DNA molecule is operatively linked to a nucleotide sequence encoding a heterologous expression product.
4. (Original) The recombinant expression vector of claim 3, wherein the heterologous expression product is a reporter protein selected from the group consisting of β-galactosidase, luciferase, chloramphenicol acetyl transferase (CAT), green fluorescent protein (GFP), human growth hormone, alkaline phosphatase, β-glucuronidase, and combinations thereof.
5. (Original) A cell comprising the isolated DNA molecule of claim 1.
- 6-19. (Cancelled).
20. (Currently Amended) An isolated tissue-specific transcriptional regulatory DNA fragment comprising a DNA sequence selected from the group consisting of zebrafish bone morphogenetic protein 4 gene which includes SEQ. ID NO. 1, SEQ. ID NO. 7, SEQ. ID NO. 8, and SEQ. ID NO. 9, and derivatives and fragments thereof.

21. (Currently Amended) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 20, wherein the DNA sequence is derived from SEQ. ID NO. 1, and derivatives and fragments thereof for directing heart-specific expression.

22. (Currently Amended) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 20, wherein the DNA sequence is derived from SEQ. ID NO. 1, SEQ. ID NO. 7, SEQ. ID NO. 8, and SEQ. ID NO. 9, and derivatives and fragments thereof for directing expression in tissues and organs selected from the group consisting of eyes, otic vesicles, hatching gland, anus, caudal fin and combinations thereof.

23.-45. (Cancelled)

46. (New) An isolated DNA molecule comprising a zebrafish bone morphogenetic protein 4 gene.

47. (New) A recombinant expression vector comprising a portion of the isolated DNA molecule of claim 46.

48. (New) The recombinant expression vector of claim 46, wherein the portion of the isolated DNA molecule is operatively linked to a nucleotide sequence encoding a heterologous expression product.

49. (New) The recombinant expression vector of claim 49, wherein the heterologous expression product is a reporter protein selected from the group consisting of β -galactosidase, luciferase, chloramphenicol acetyl transferase (CAT), green fluorescent protein (GFP), human growth hormone, alkaline phosphatase, β -glucuronidase, and combinations thereof.

50. (New) A cell comprising the isolated DNA molecule of claim 46.

51. (New) An isolated tissue-specific transcriptional regulatory DNA fragment comprising a portion of the isolated DNA molecule of claim 46.

52. (New) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 51, wherein the DNA sequence is directed for heart-specific expression.

53. (New) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 51, wherein the DNA sequence is directed for expression in eyes.
54. (New) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 51, wherein the DNA sequence is directed for expression in otic vesicles.
55. (New) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 51, wherein the DNA sequence is directed for expression in hatching gland.
56. (New) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 51, wherein the DNA sequence is directed for expression in anus.
57. (New) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 51, wherein the DNA sequence is directed for expression in caudal fin.
58. (New) An isolated DNA molecule comprising a zebrafish bone morphogenetic protein 4 gene, encoding a zebrafish bone morphogenetic protein 4 and including a nucleic acid sequence of SEQ. ID NO. 1, SEQ. ID NO. 9, and SEQ ID NO. 8.
59. (New) The isolated DNA molecule of claim 58, wherein the nucleic acid sequence further comprises SEQ. ID NO. 7.
60. (New) The isolated DNA molecule of claim 59, wherein the nucleic acid sequence further comprises SEQ. ID NO. 4.